

# Service Manual

10:1 Auto Iris Servo Control Zoom Lens/14:1 Auto Iris Servo Control Zoom Lens  
AW-LZ10MD6/AW-LZ14MD55/AW-LZ14ST55



AW-LZ10MD6



AW-LZ14MD55



AW-LZ14ST55

## SPECIFICATIONS

### AW-LZ10MD6

<b>Focal Length :</b>	6 - 60 mm, 10 Times, Maximum Relative
<b>Aperture :</b>	F1.6 (6 - 60 mm)
<b>Image Size :</b>	φ6 mm (4.8 x 3.6 mm)
<b>Iris :</b>	F1.6 - F16, CLOSE Servo
<b>Zoom :</b>	Servo
<b>Focus :</b>	Servo
<b>Focusing Range :</b>	1.2 m - ∞
<b>Field of View :</b>	Wide Tele
Horizontal :	43°36' - 4°35'
Vertical :	33°24' - 3°26'
Diagonal :	53°08' - 5°43'
<b>Flangeback :</b>	17.526 mm ± 0.03 mm
<b>Mount :</b>	C Mount
<b>Filter Size :</b>	φ55 mm P = 0.75 mm
<b>Dimensions :</b>	68 (H) x 75 (W) x 112 (D) mm [2-21/32"(H) x 2-31/32"(W) x 4-13/32"(D)]
<b>Weight :</b>	0.6 kg (1.32 lbs)
<b>Input Voltage :</b>	+12 V DC
<b>Current Consumption :</b>	250 mA Max
<b>Iris Operating Time :</b>	Approx. 3 s (Full Travel)
<b>Zoom Operating Time :</b>	Approx. 4 s (Full Travel)
<b>Camera Connector :</b>	HR10A-10P-12P, HIROSE
<b>Control Connector :</b>	HR10A-10P-12S, HIROSE

# Panasonic




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distribution is a violation of law.

### **WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public.

It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.

Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

 <b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN		This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.
<b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		This symbol alerts the user that important literature concerning the operation and maintenance of this has been included. Therefore, it should be read carefully in order to avoid any problems.

### **IMPORTANT SAFETY NOTICE**

There are special components used in this equipment which are important for safety. These parts are indicated by the "⚠" mark on the schematic diagram and the replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-radiation, shock, fire, or other hazards. Do not modify the original design without permission of manufacture.

## **AW-LZ14MD55**

<b>Focal Length :</b>	5.5 - 77 mm, 14 times, Maximum Relative
<b>Aperture :</b>	F1.4 (5.5 - 68 mm) - F1.6 (77 mm)
<b>Image Size :</b>	φ6 mm (4.8 x 3.6 mm)
<b>Iris :</b>	F1.4 - F16, CLOSE Servo or Manual
<b>Zoom :</b>	Servo or Manual
<b>Focus :</b>	Servo or Manual
<b>Focusing Range :</b>	1 m - ∞
<b>Field of View :</b>	Wide Tele
Horizontal :	47°09' - 3°34'
Vertical :	36°15' - 2°41'
Diagonal :	57°13' - 4°28'
<b>Macro Range :</b>	0.01 m -
<b>Flangeback :</b>	17.526 mm (±0.2 mm Adjustable)
<b>Mount :</b>	C Mount
<b>Filter Size :</b>	φ62 mm P = 0.75 mm
<b>Dimensions :</b>	108 (W) x 100 (H) x 199 (D) mm [4-1/4" (W) x 3-15/16" (H) x 7-27/32" (D)]
<b>Weight :</b>	0.9 kg (1.99 lbs)
<b>Input Voltage :</b>	+12 V DC
<b>Current Consumption :</b>	400 mA Max.
<b>Iris Operating Time :</b>	Approx. 1.5 s (Full Travel)
<b>Zoom Operating Time :</b>	Approx. 3 s (Full Travel)
<b>Focus Operating Time :</b>	Approx. 3 s (Full Travel)
<b>Camera Connector :</b>	HR10A-10P-12P, HIROSE
<b>Control Connector :</b>	HR10A-10P-12S, HIROSE

## AW-LZ14ST55

<b>Focal Length :</b>	5.5 - 77 mm, 14 times, Maximum Relative
<b>Aperture :</b>	F1.4 (5.5 - 68 mm) - F1.6 (77 mm)
<b>Image Size :</b>	φ6 mm (4.8 x 3.6 mm)
<b>Iris :</b>	F1.4 - F16, CLOSE
<b>Zoom :</b>	Servo or Manual
<b>Focus :</b>	Manual
<b>Focusing Range :</b>	1 m - ∞
<b>Field of View :</b>	Wide    Tele
Horizontal :	47°09' - 3°34'
Vertical :	36°15' - 2°41'
Diagonal :	57°13' - 4°28'
<b>Macro Range :</b>	0.01 m -
<b>Flangeback :</b>	17.526 mm (±0.2 mm Adjustable)
<b>Mount :</b>	C Mount
<b>Filter Size :</b>	φ62 mm P = 0.75 mm
<b>Dimensions :</b>	100 (H) x 149 (W) x 199 (D) mm [3-15/16" (H) x 5-27/32" (W) x 7-27/32" (D)]
<b>Weight :</b>	0.9 kg (1.99 lbs)
<b>Input Voltage :</b>	+12 V DC
<b>Current Consumption :</b>	200 mA Max
<b>Iris Operating Time :</b>	Approx. 1.5 s (Full Travel)
<b>Zoom Operating Time :</b>	Approx. 3 - 15 s (Full Travel)
<b>Camera Connector :</b>	HR10A-10P-12P, HIROSE
<b>Zoom Connector :</b>	R03 - R8F3, TAJIMI

Weight and dimensions shown are approximate.  
Specifications are subject to change without notice.

**NOTE : Refer to the operating instructions of AW-E300E series for details.**

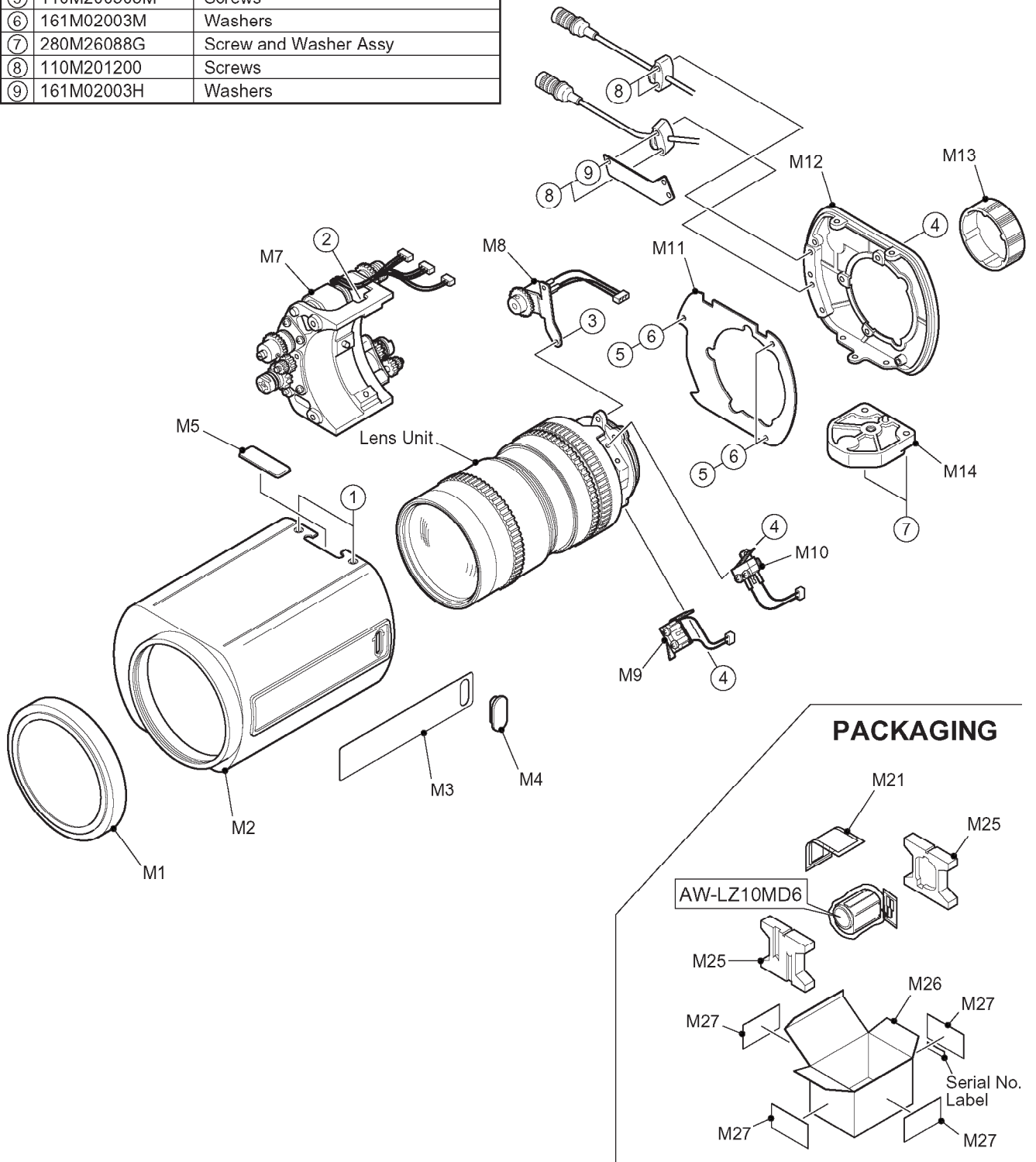
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# EXPLODED VIEW OF AW-LZ10MD6

○ Numbers show screws, washers, nuts and etc.

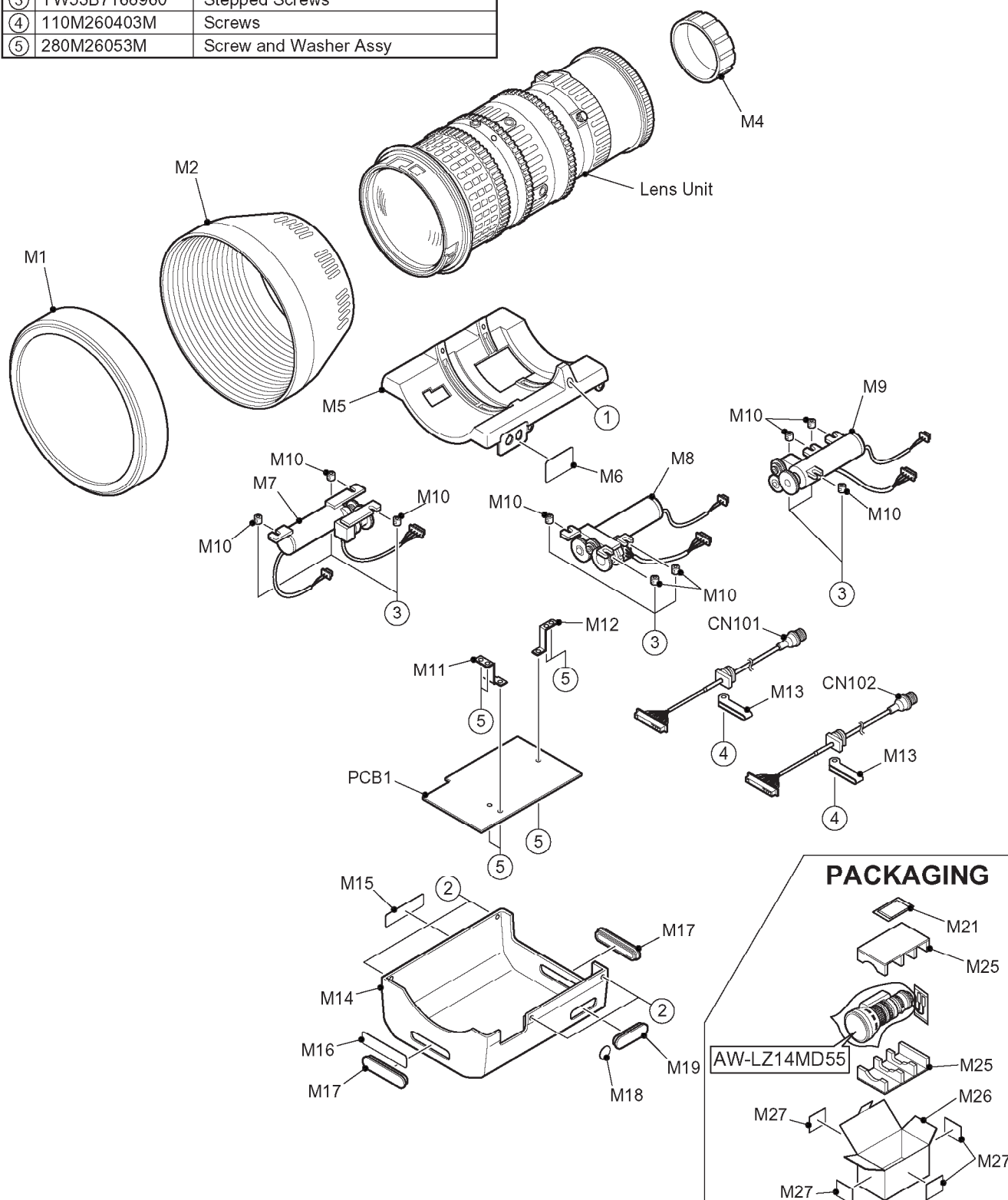
No.	Screws	Description
①	110M200353G	Screws
②	280M20062M	Screw and Washer Assy
③	280M200702M	Screws
④	110M200353	Screws
⑤	110M200503M	Screws
⑥	161M02003M	Washers
⑦	280M26088G	Screw and Washer Assy
⑧	110M201200	Screws
⑨	161M02003H	Washers



# EXPLODED VIEW OF AW-LZ14MD55

○ Numbers show screws, washers, nuts and etc.

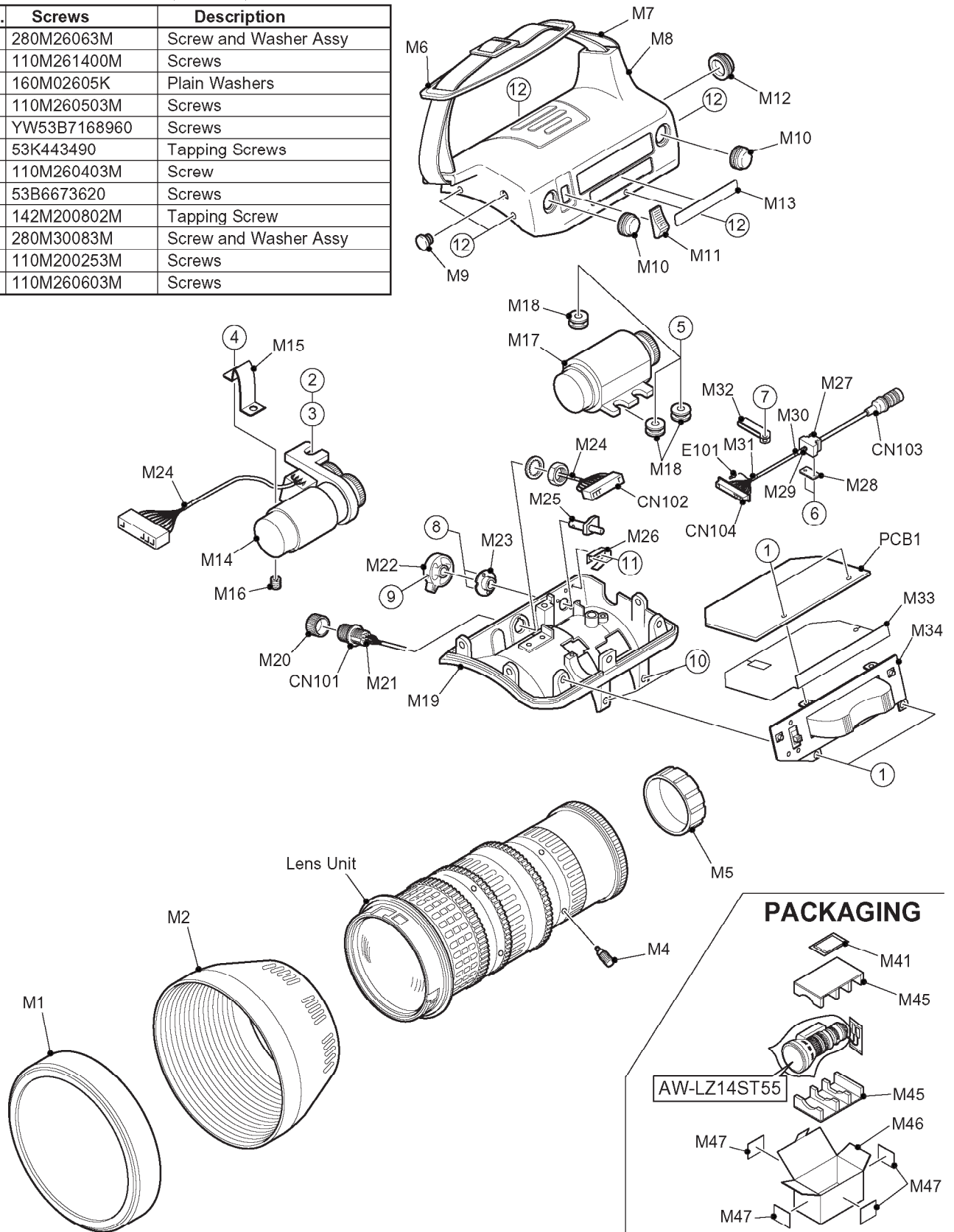
No.	Screws	Description
①	280M30083M	Screw and Washer Assy
②	110M260503M	Screws
③	YW53B7168960	Stepped Screws
④	110M260403M	Screws
⑤	280M26053M	Screw and Washer Assy



# EXPLODED VIEW OF AW-LZ14ST55

○ Numbers show screws, washers, nuts and etc.

No.	Screws	Description
①	280M26063M	Screw and Washer Assy
②	110M261400M	Screws
③	160M02605K	Plain Washers
④	110M260503M	Screws
⑤	YW53B7168960	Screws
⑥	53K443490	Tapping Screws
⑦	110M260403M	Screw
⑧	53B6673620	Screws
⑨	142M200802M	Tapping Screw
⑩	280M30083M	Screw and Washer Assy
⑪	110M200253M	Screws
⑫	110M260603M	Screws



# REPLACEMENT PARTS LIST

## Important Notice

- Components identified by " △ " mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.
- RTL : Retention Time Limited (No longer available after discontinuing product).

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
<b>AW-LZ10MD6</b>			<b>AW-LZ14MD55</b>		
<b>MISCELLANEOUS</b>			<b>MISCELLANEOUS</b>		
M1	57K852720	Lens Cap	PCB1	338A8318010	Printed Circuit Board Assy
M2	11A8429330	Cover	CN101	113A8309930	Connector Assy
M3	58B8496330	Panel	CN102	112A8325510	Connector Assy
M4	57B6855550	Cap	M1	300M100N	Lens Cap
M5	57B8423440	Cap	M2	27B7981610	Hood
M7	309A6653470	Motor Assy	M4	57K798970	Rear Cap
M8	117A8463390	Motor Assy	M5	41B7985540	Mounting Cast
M9	121A8463470	Limit Switch Assy	M6	57B8309970	Adhesive Sheet
M10	121A8463460	Limit Switch Assy	M7	101A7985310	Iris Motor Assy
M11	338A8463450	Plate	M8	101A7985240	Focus Motor Assy
M12	11B6637631	Rear Cover	M9	101A7985290	Zoom Motor Assy
M13	57K798970	Cap	M10	YW42B7168950	Bushing Rubber
M14	13B6638330	Bracket	M11	46B7985560	Bracket
<b>ACCESSORY PARTS/PACKAGING PARTS</b>			M12	46B7985550	Bracket
M21	△ YW7J1A155A	Operating Instructions	M13	111B6362640	Cable Retainer
M25	205A6711200	Packaging Assy	M14	11B7985410	Main Cover
M26	203B5623930	Packaging Box	M15	58B8496390	Name Plate
M27	YVW8FA0137A4	Packaging Label	M16	58B7985520	Label
			M17	57B7985570	Rubber Cap
			M18	58B4963810	Label
			M19	57B4907320	Rubber Cap
			<b>ACCESSORY PARTS/PACKAGING PARTS</b>		
			M21	△ YW7J1A150A	Operating Instructions
			M25	205A9195880	Packaging Assy
			M26	203B7569530	Packaging Box
			M27	YVW8FA0134A4	Packaging Label

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
<b>AW-LZ14ST55</b>			<b>ACCESSORY PARTS/PACKAGING PARTS</b>		
<b>MISCELLANEOUS</b>			M41	△ YW7J1A153A	Operating Instructions
PCB1	338A8317120	Printed Circuit Board Assy	M45	205A9195880	Packaging Assy
CN101	YF112K320460	Connector	M46	203B7569530	Packaging Box
CN102	112B6644770	Connector with Wires	M47	YWV8FA0137A4	Packaging Label
CN103	113B4459440	Connector with Cable			
CN104	112K794240	Socket			
E101	112K794250	Terminal			
M1	300M100N	Cover			
M2	27B7981610	Hood			
M4	YF47B1607400	Lever			
M5	57K798970	Rear Cap			
M6	150B7438220	Pad			
M7	56B6674120	Belt			
M8	YW11B6362720	Main Cover			
M9	YW57B3922140	Rubber Cap			
M10	YW57B6377180	Switch Cap			
M11	YW16A6362670	Switch Cap			
M12	YF57B2160890	Switch Cap			
M13	58B8496450	Name Plate			
M14	34A7981790	Iris Gear Assy			
M15	85B7979300	Retaining Plate			
M16	50B7981830	Coiled Spring			
M17	34A7981800	Zoom Gear Assy			
M18	YW42B7168950	Rubber Bushing			
M19	41B7981820	Base Casting			
M20	YF57B1990290	Connector Cap			
M21	115R7200030	Heat Shrinkable Tube			
M22	16B6673320	Zoom Mode Select Lever			
M23	31B7981810	Bushing			
M24	115R7210030	Heat Shrinkable Tube			
M25	29B6673330	Rotatable Plate			
M26	50B7957170	Spring Plate			
M27	81B3965290	Cable Holder			
M28	41B4133060	Retaining Plate			
M29	109B6362640	Copper Foil			
M30	115R7130010	Heat Shrinkable Tube			
M31	115R7220050	Heat Shrinkable Tube			
M32	111B6362640	Cable Retainer			
M33	115B7957190	Insulation Sheet			
M34	314A6362690	Seesaw Control			